



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,986	08/26/2003	Donald Owen Holte	9349	2490
27752	7590	09/15/2005	EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			SHAW, CLIFFORD C	
		ART UNIT		PAPER NUMBER
		1725		
DATE MAILED: 09/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/647,986	HOLTE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Clifford C. Shaw	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 7-13 is/are allowed.
- 6) Claim(s) 1-6, 14 and 15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0207</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**Detailed Action**

1.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.) Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (5,990,446). The discussion in columns 3-7 of Zhang et al. (5,990,446) disclose a method of joining abutted workpieces whereby the first surfaces of the workpieces are exposed to a deep penetration plasma torch and the second surfaces are exposed to a gas tungsten arc process. The claims differ from the teachings of Zhang et al. (5,990,446) in specifying that the weld from the first surface is at least through 75 percent of the workpiece surface. This difference does not patentably distinguish over the prior art. It is considered obvious that the penetration from the plasma torch in Zhang et al. (5,990,446) is at least 75 percent because the purpose of the invention in Zhang et al. (5,990,446) is to enhance to plasma penetration for thick workpieces and a penetration of 75 percent would be in accordance with these teachings.

3.) Claims 2-5, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (5,990,446) as applied to claim 1 above, and further in view of Pierart (3,680,584). The only aspect of the claims to which the rejection above does not apply is the provision for a laminated workpiece. This difference does not patentably distinguish over the prior art. At the

time applicant's invention was made, it would have been obvious to have applied the teachings of Zhang et al. (5,990,446) to any suitable workpiece. In particular, it would have been obvious to have applied these teachings to a laminated workpiece as claimed, the motivation being the teachings of Pierart (3,680,584) that it is advantageous to conduct a deep penetration weld on a laminated workpiece (see figures 1 and 2 in Pierart (3,680,584) and note the deep penetration weld at "S").

4.) Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (5,990,446) taken with Pierart (3,680,584) as applied to claims 2-5, 14, and 15 above, and further in view of the European Patent Application document no. EP0852984A1, cited by applicant. The only aspect of the claim to which the rejection above does not apply is the provision for laser welding. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used laser welding in the combination, the motivation being the teachings of the European Patent Application document no. EP0852984A1 that laser welding and arc welding can be advantageously combined (see the abstract of the European Patent Application document no. EP0852984A1).

5.) Claims 7-13 are allowable over the prior art of record. None of the prior art of record teaches the methods with all of the steps as set forth in independent claims 7 and 11, particularly the limitations associated with the fine surface and the coarse surface of the workpieces to be joined. The dependent claims are allowable at least because they depend from allowable independent claims 7 and 11.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

September 13, 2005